CLAIMS

1. A method for the numerical simulation of a pressing process comprising the steps consisting of:

- recording at least one meta-model consisting of a permanent collection of numerical representations of the elementary constituents of pressing tools, each of the said elementary constituents being defined in the form of finite elements, and comprising numerical static attributes,

- recording a numerical model of deformation of a blank used in the process to be simulated,

- selecting a subset of the said permanent collection, for temporary recording of elementary constituents representing a particular pressing tool corresponding to the simulation in question, the said subset constituting a specific collection in the form of digitised finite elements,

- parameterising the said digitised finite elements of the specific collection, as well as the corresponding attributes according to the characteristics of the process to be simulated,

- recording numerical information representing the relative movements of the components of the said specific collection, according to the operating cycles of the pressing process to be simulated,

- recalculating the numerical models of deformation of the blank according to the numerical information recorded on the one hand in the parameterised specific collection, the numerical model of the blank, and the specific movements on the other hand,

- generating a numerical or visual representation of the deformations of the blank by the application of the said recalculated numerical model.

2. A simulation method according to Claim 1, characterised in that the selection step modifies the state of the elementary constituents that are not pertinent with regard to the selected constituents.

3. A simulation method according to Claim 1, characterised in that it includes a step of loading, from an external information medium, at least part of the collection parameterising information.

4. A simulation method according to Claim 1, characterised in that it includes a step of loading, from an external information medium, the model of the blank.

5. A simulation method according to Claim 1, characterised in that it includes a step of loading, from an external information medium, the numerical representation of the said subset.

6. A simulation method according to Claim 1, characterised in that the step of forming the specific collection is performed via the display of a graphical interface and the recording of information captured from the said graphical interface.

7. A simulation method according to Claim 6, characterised in that the step of displaying a graphical interface comprises an operation of personalising a prerecorded interface, this personalisation at least partly taking account of the information coming from the prior steps of the method.

8. A simulation method according to Claim 1, characterised in that several levels of use are defined, one of the levels of use, supervision, requiring a common generic parameterising defining to a major extent the pressing method concerned and the other, basic, levels of use, basic, requiring no more than partial parameterising, complementary and specific, benefiting from the previously performed parameterising of the supervision level.